| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|----------|------|--|---------------------------|---------------------|---------|------------------|
| L2 | 211 | 360/318,321,327.32.ccls. | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 10:06 |
| L4 | 13 | 2 and (sens\$3 adj element) and (flux adj guide) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 10:07 |
| L5 | 6 | 4 and (track adj width) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 10:07 |
| S1 | 802 | 360/324-327.ccls. | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 09:47 |
| S2 | 743 | 29/603.13-603.17.ccls. | USPAT; JPO; DERWENT | OR . | ON . | 2004/08/17 08:31 |
| S3 | 753 | 365/158,173.ccls. | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:31 |
| S4 | 4361 | tunnel adj (junction or barrier) | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:49 |
| S5 | 2007 | tunnel adj barrier | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 09:10 |
| S6 | 86 | 360/324-327.ccls. and (tunnel adj barrier) | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:33 |
| S17 | 1041 | 216/39,41.ccls. and etch\$3 | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:47 |
| S18 | 2 | (tunnel adj (junction or barrier)) and (216/39,41.ccls. and etch\$3) | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:47 |
| S19 | 334 | 216/65.ccls. and (etch\$3) | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:49 |
| S26 | 303 | 365/158,173.ccls. and (tunnel adj (junction or barrier)) | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:51 |
| S27 | 84 | ((tunnel adj (junction or barrier)) with (magnetic adj layer)) and 365/158,173.ccls. | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:51 |
| S31 | 5267 | 427/127,128.ccls. | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:58 |

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|-------|-----|---|-------------------------------------|----|-----|------------------|
| S32 | 1 | ((tunnel adj (junction or barrier)) with (magnetic adj layer)) and 427/127,128.ccls. | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 08:58 |
| S71 | 637 | 360/324.1,324.2,324.11,324.12. ccls. | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 09:57 |
| . S72 | 152 | (tunnel adj (junction or barrier)) and 360/324.1,324.2,324.11,324. 12.ccls. | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 09:58 |
| S73 | 1 | (tunnel adj magnetoresistive adj element) and ((tunnel adj (junction or barrier)) and 360/324.1,324.2, 324.11,324.12.ccls.) | USPAT; JPO; DERWENT | OR | ON | 2004/08/17 09:58 |
| S74 | 0 | ((tunnel adj (junction or barrier)) and 360/324.1,324.2,324.11,324. 12.ccls.) and @ay<"2000" | JPO | OR | ON | 2004/08/17 09:58 |
| S80 | 2 | ("6657825").PN. | USPAT; USOCR; JPO; DERWENT | OR | OFF | 2005/05/12 10:06 |
| S81 | | ("4663685" "5650958" "5712565" "5712612" "5729410" "5739987" "5764445" "5780176" "5867889" "5898547" "5901018" "5909344" "5910344" "5946167" "5949623" "5966012" "5993566" "5995339" "6005753" "6023395" "6030753" "6033491" "6052261" "6052263").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/05/11 09:22 |
| S82 | 30 | (sens\$3 adj element) with (flux adj guide) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:20 |
| S83 | 2 | (sens\$3 adj element) with (flux adj guide) with (track adj width) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 09:48 |
| S84 | 24 | S82 and @ad<"20010802" | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:01 |
| S85 | 5 | S84 and (track adj width) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:01 |
| S86 | 2 | (track width) near (photo adj process\$3) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:16 |
| S87 | 2 | S86 and @ad<"20010802" | USPAT; JPO; DERWENT. | OR | ON | 2005/05/11 10:19 |

| S88 | 40 | (track width) with (photo adj process\$3) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:19 |
|----------|-----|---|------------------------------|------|----|------------------|
| S89 | 35 | S88 and @ad<"20010802" | USPAT; JPO; DERWENT | OR . | ON | 2005/05/11 10:03 |
| S90 | 0 | S82 and S89 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:03 |
| S91 | 6 | (track width) with (photo adj process\$3) with (defin\$3 or measur\$3) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:08 |
| S92 | 7 | (track width) with ((photo adj process\$3) or (photolithograph)) with (defin\$3 or measur\$3) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:09 |
| S93 | 584 | (track width) with (photo) with (defin\$3 or measur\$3) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:12 |
| S94 | 1 | S82 and S93 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:12 |
| S95 | 80 | (sens\$3 adj element) and (flux adj guide) | USPAT; JPO; DERWENT | OR . | ON | 2005/05/12 10:07 |
| S96 | 1 | S93 and S95 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:13 |
| S97 | 5 | "Ho-kuok-san.in" or pan-tao.in. | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:14 |
| S98 | 24 | ("4663685" "5650958" "5712565" "5712612" "5729410" "5739987" "5764445" "5780176" "5867889" "5898547" "5901018" "5909344" "5910344" "5946167" "5949623" "5966012" "5993566" "5995339" "6005753" "6023395" "6030753" "6033491" "6052261" "6052263").PN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/05/11 11:01 |
| S99 | 2 | S82 and S98 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:14 |
| S10 0 | 5 | S95 and S98 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:15 |
| S10 1 | 3 | S100 and (track adj width) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:18 |

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|----------|----------|---|---------------------------|------|----|------------------|
| S10 2 | 1 | (US-5898547-\$).did. | USPAT | OR | ON | 2005/05/11 10:18 |
| S10 3 | 1 | S95 and S102 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:18 |
| S10 4 | 0 | S103 and (track adj width) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:26 |
| S10 5 | 0 | S103 and (photo adj process\$3) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:19 |
| S10 6 | 0 | S103 and photo | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:19 |
| S10 7 | 24 | S82 and @ad<"20010802" | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 10:19 |
| S10 8 | 1 | S82 and @ad<"20010802" | EPO; JPO | OR | ON | 2005/05/11 11:03 |
| S10 9 | 7 | (sens\$3 adj element) with (flux adj guide) | EPO; JPO | OR | ON | 2005/05/11 10:20 |
| S11 0 | 106 | (track adj width) with photolithograp\$3 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:03 |
| S11 1 | 0 | S110 and S95 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:02 |
| S11 2 | 6 | S110 and (sens\$3 adj element) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:03 |
| S11 3 | 0 | S112 and @ad<"20010802" | EPO; JPO | OR . | ON | 2005/05/11 11:03 |
| S11 4 | 7 | S110 and (flux adj guide) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:07 |
| S11 5 | . 0 | S114 and @ad<"20010802" | EPO; JPO | OR | ON | 2005/05/11 11:05 |
| S11 6 | 243 | (track adj width) same photolithograp\$3 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:18 |
| S11 7 | . 2 | S95 and S116 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:04 |
| S11 8 | 69 | S116 and ((tunnel adj junction) or MTJ or (spin adj valve)) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:25 |
| S11 9 | 0 | S118 and @ad<"20010802" | EPO; JPO | OR | ON | 2005/05/11 11:05 |

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|-----------|--------------|--|---------------------------|------|------|------------------|
| S12 0 | 43 | S118 and @ad<"20010101" | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:24 |
| S12 1 | 3 | S120 and (flux adj guide) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:26 |
| S12 2 | 307 | (track adj width) same (photolithograph\$3 or lithograph\$2) | USPAT; JPO; DERWENT | OR . | ON . | 2005/05/11 11:23 |
| S12 3 | 4 | S95 and S122 | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:18 |
| S12 4 | 53 | (track adj width) same (photolithograph\$3 or lithograph\$2) same flux | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:26 |
| S12 5 | 36 | S124 and @ad<"20010101" | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:26 |
| .S12 6 | 7 | S118 and S125 | USPAT; JPO; DERWENT | OR | ON. | 2005/05/11 11:25 |
| S12 7 | 6510 | ((tunnel adj junction) or MTJ or (spin adj valve)) | USPAT; JPO; DERWENT | OR | ON - | 2005/05/11 11:25 |
| S12 8 | 153 | S127 and (flux adj guide) | ÚSPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:26 |
| S12 9 | 73 | S128 and (track adj width) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 10:07 |
| S13 0 | 25 | S129 and (photolithograph\$3 or lithograph\$2) | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:26 |
| S13 1 | 11 | S130 and @ad<"20010101" | USPAT; JPO; DERWENT | OR | ON | 2005/05/11 11:26 |
| S13 2 | 0 | (spin adj valve adj sensor) with (pinned with pinning with barrier with free with cap) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 07:59 |
| S13 3 | 0 | (spin adj valve adj sensor) same (pinned with pinning with barrier with free with cap) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 07:59 |
| S13 4 | 0 | (spin adj valve adj sensor) same (ferromagnetic with antiferromagnetic with barrier with free with cap) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 07:59 |
| S13 5 | 7 | (ferromagnetic with antiferromagnetic with barrier with free with cap) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 08:00 |

| S13 6 | . 23 | (ferromagnetic same antiferromagnetic same barrier same (free adj layer) same cap) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 08:16 |
|-----------|------|--|---------------------------|----|----|------------------|
| S13 7 | 3 | S136 and (flux adj guide) | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 08:05 |
| S13 8 | . 0 | expos\$3 with anitferromagnetic | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 08:17 |
| S13 9 | 117 | expos\$3 with antiferromagnetic | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 08:19 |
| S14 0 | 3 | S136 and S139 | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 08:17 |
| \$14 1 | 8 | expos\$3 near antiferromagnetic | USPAT; JPO; DERWENT | OR | ON | 2005/05/12 08:19 |